

REMARKS

Reconsideration is requested.

Claims 1-34 and 37-42 have been canceled, without prejudice.

The amendment to claim 35 finds support, for example, in the now-canceled claims 37-42, at page 7, lines 2-5 and page 8, lines 8-11 of the specification as well as the experimental section of the disclosure. No new matter has been added.

The Examiner's requirement for an Abstract on a separate sheet is noted however an Abstract on a separate sheet was submitted with the Preliminary Amendment of October 15, 2004 along with a separate request/direction for entry of the same after the claims pages. A further copy of the previously-submitted Abstract is attached. The Examiner is requested to confirm entry of the Abstract.

The Rule 75 objection of claim 57 as being an alleged duplicate of claim 58 is traversed and reconsideration and withdrawal of the objection are requested. The applicants may claim disclosed alternatives in a manner which is definite and the Examiner is requested to withdraw the objection.

The Section 112, first paragraph "written description", rejection of claims 35, 38-39, 43-46 and 64-67 is believed to be obviated by the above amendments. The claims have been amended in response to the Examiner's comments and withdrawal of the rejection is requested.

The Section 112, first paragraph "enablement", rejection of claims 35, 38-39, 43-46, 54-56 and 64-67, is believed to be obviated by the above amendments. The claims have been amended in response to the Examiner's comments and withdrawal of the rejection is requested.

The Section 102 rejection of claims 35-36, 47-51, 53-55, 57-58 and 60-63 over Barry (Human Gene Therapy 12:1103-1108; 2001), is traversed. Reconsideration and withdrawal of the rejection are requested in view of the following distinguishing comments.

Barry is understood to describe the incorporation of a cPPT and a PRE (posttranscriptional regulatory element) element into lentivirus vectors, such incorporation providing increased transduction efficiency and transgene expression. Barry does not however describe a vector, according to the presently claimed invention, suitable for transgene delivery into mammalian cells, comprising a chimeric genetic construct comprising a transgene operably linked to at least two distinct posttranscriptional regulatory elements functional in mammalian cells, at least one of the posttranscriptional regulatory elements comprising all or a portion of a UTR region of a eukaryotic mRNA selected from a WPRE element, tau 3'UTR, TH3'UTR and APP5'UTR or a functional portion thereof.

Withdrawal of the Section 102 rejection is requested.

The following Section 103 rejections are traversed:

the Section 103 rejection of claims 35, 37-38 and 46 over Barry (Human Gene Therapy 12:1103-1108; 2001) in view of Paulding (JBC 274:2532-2538),

the Section 103 rejection of claims 39 and 43 over Barry, Paulding and Ramezani (Molecular Therapy 2:458-469; 2000),

the Section 103 rejection of claims 40, 44 and 64-65 over Barry, Paulding, Ramezani and Rogers (JBC 274:6421-6431; 1999),

the Section 103 rejection of claims 41-42, 45 and 66-67 over Barry, Paulding, Ramezani, Rogers and Aronov (J. Mol. Neurosci., 12:131-145; 1999), and

the Section 103 rejection of claims 52, 56 and 59 over Barry and Chang (Curr. Gene Ther. 2:237-251; 2001).

Reconsideration and withdrawal of the Section 103 rejections are requested in view of the following distinguishing comments.

The deficiencies of Barry are described above. The secondary references fail to cure these deficiencies.

The applicants understand Paulding to describe a fragment within the TH mRNA 3' untranslated region. The applicants further understand Ramezani to describe the inclusion of the WPRE element to enhance lentiviral gene expression in several self-inactivating vectors containing the GFP reporter transgene. Rogers is understood to describe a 90 nucleotide sequence of the APP gene 5'UTR that enhances the translation of a transgene mRNA product. Aronov is further understood to describe a 240 bp (H fragment) of the tau 3'UTR that can stabilize *c-fos* transgene and tau mRNAs. Finally, Chang is understood to describe lentiviral vectors usable to carry foreign genes, such as GDNF, in target cells, such as monkey brain cells for the correction of Parkinson disease-like symptoms, or such as PDE β in retinal cells.

None of the cited documents, individually or in combination, however describe or suggest a vector according to the claimed invention, suitable for transgene delivery into mammalian cells, containing a chimeric genetic construct containing a transgene operably linked to at least two distinct post transcriptional regulatory elements functional in mammalian cells, at least one of the posttranscriptional regulatory elements

comprising all or a portion of a UTR region of a eukaryotic mRNA selected from a WPRE element, tau 3'UTR, TH3'UTR and APP5'UTR or a functional portion thereof.

Withdrawal of the Section 103 rejections is requested.

The claims are submitted to be in condition for allowance and a Notice to that effect is requested.

The Examiner is requested to contact the undersigned in the event anything further is required.

Respectfully submitted,

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